

# MNG 322 - MARINE TURBINES

---

## Course Description

This course is an in-depth study of marine turbine propulsion plants. It covers theory, construction, operation, maintenance and inspection procedures typically associated with marine use. Associated systems such as lubrication, exhaust and condensate systems are also covered. Drive trains, reduction gear, stern tubes shafting and propellers are also discussed. STCW.

## Credit Hours

2.5

## Contact Hours

2.5

## Lecture Hours

2.5

## Required Prerequisites

All prerequisites for all GLMA courses are satisfied by following the approved Course Sequence Guide and any deviation from this guide needs to be approved by the cadet's adviser.

## Course Learning Outcomes

### Knowledge:

- Describe the theory of operation for all components relating to marine turbines.

### Application:

- Demonstrate the operation of components of marine turbines.
- Demonstrate knowledge of marine turbines.

### Integration:

- Discern the importance of turbines within the steam propulsion systems used onboard merchant vessels.
- Demonstrate proper operation of the components of a marine turbine.

### Human Dimension:

- Recognize the importance of turbine maintenance.
- Recognize the importance of proper watch keeping on a merchant vessel which employs steam propulsion.

### Caring - Civic Learning:

- Identify the expectations of a licensed engineering officer onboard a vessel.

### Learning How to Learn:

- Demonstrate competency on the STCW Code Knowledge, Understanding and Proficiencies (KUP) for ratings Forming Part of an Engineering Watch Task No.: 1.1.H(S), 1.1.I(S), 3.1.A, 3.1.C.,
- Demonstrate competency on the STCW Code KUPs for Officer in Charge of an Engineering Watch Task No.: 1.1.C, 4.3.D, 4.3.G, 6.1.C.